

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-20, all of the pending claims, stand finally rejected based on 35 USC Section 102 as being anticipated by US patent 5,339,392 ("Risberg et al."). The rejection is traversed based on the arguments set forth below. The undersigned notes that Marion D. Skeen is an inventor of both the novel subject matter of the claimed invention and the subject matter claimed in Risberg et al. Accordingly, Mr. Skeen is particularly well qualified to understand the technology and practical nuances of all of the relevant subject matter. The arguments set forth below are derived from conversations with Mr. Skeen.

Risberg et. al. discloses software for composing "active documents," i.e., video displays of real time data in a user definable style. See column 2, lines 31-34. The software disclosed in Risberg et al. runs on a single computer to define a display for the user of that computer. This reference also discloses that scripted commands can be executed if real time data exceeds preset limits. The scripted commands are programmatic commands, i.e. commands that are executed in sequence. See column 10, lines 9-11 of Risberg et al. The software disclosed in Risberg et al. automatically subscribes to proper sources of the real time data to be displayed in the active documents. See column 2, lines 39-44, column 4, lines 58-67, and column 8, lines 63-67 for example. Accordingly, Risberg discloses an event driven publish/subscribe architecture similar to that discussed in the subject application. See page 10 of the application. Risberg also discloses that an event can cause extraction from a specified field of a data object that is to be displayed and that a scripted command can be executed if the data field exceeds a limit. See column 23, lines 56-67 for example.

In contrast, the invention, as recited in independent claims 1 and 11, receives complex queries that are declarative and not programmatic. In other words, the queries recited in the claims are not executable commands but are specifications to be processed by a query engine. For example, as disclosed in the specification of the subject patent application, the query of the preferred embodiment includes a SELECT clause specifying a result to be returned by the query, a FROM clause which specifies a source of data, and a WHERE clause which specifies constraints. A query causes a query engine to select the specified information. See page 2, lines

8-12 of the subject application. A query describes results that the user is interested in. See page 11, lines 16-20 of the subject application. Further, all queries effected by an event are processed simultaneously. See page 12, lines 7-9 of the subject application. In the preferred embodiment, queries are structured in Object Query Language (OQL), see page 13 of the subject application, which is a specification for queries and which includes declarative statements, not executable commands. The effect of the portions of applicants disclosure noted above is to clearly define the claimed queries as being declarative specifications, not executable commands. This is consistent with the well accepted definition of "query."

The Examiner indicates that claimed complex queries read on the scripted commands of Risberg et al. See the bottom of page 2 of the Office Action. However, the software disclosed in Risberg et al. filters data of event objects based on predetermined limits and executes the script if the data exceeds the limits. The scripts are not queries but are display instructions or other executable commands as noted above. See column 9, lines 61-65 and column 10, lines 6-11, for example. Significantly, because the scripts disclosed in Risberg et al. are executable commands, the scripts are not "queries." While the event driven system disclosed in Risberg et al. could utilize queries to select desired data, this reference fails to disclose "means for responding to an event to initiate execution of all query processes having constraints satisfied by data sources" or the corresponding function of such means. In fact, the Examiner has failed to even assert that any portion of Risberg et al. discloses such a function. The Examiner alleges that Risberg et al, discloses every other element of claim 1 but omits this critical element.

For the reasons set forth above, independent claims 1 and 11 are believed to be allowable. Further, the remaining claims are believed to be allowable by virtue of their dependence from one of claims 1 and 11 and any additional novel features recited therein. With respect to claims 2 and 12, the Examiner deems that the claimed attribute index reads on comparing data fields of a database. However, as noted in the subject application, a database index merely yields a set of data records containing a particular value. In contrast, the claimed constraint index yields a set of queries having constraints satisfied by a particular value of the index attribute. Claims 2 and 12 are believed to be allowable for this reason also. With respect to claim 3, Risberg et al. discloses a "brute force" method in which any queries are executed in seriatim and not

simultaneously as claimed. With respect to claim 9, the *result* of any queries used in Risberg et al. is merely a display of data and not an event service.

For the reasons stated above, all of the pending claims are believed to be allowable. Accordingly, Notice of Allowance is solicited.

Respectfully submitted,



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